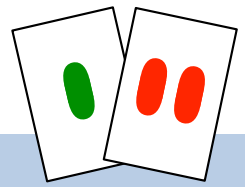


Patterned Pathways

(Grades 3 through 8)



Strands:

Number & Quantity	
Algebra	
Functions	
Geometry	X
Statistics & Probability	

Use your pattern recognition skills to move your game piece across a patterned board in this game for 1 to 4 players!

Set-Up:

- Use commercial Set® cards. Remove all cards with 3 shapes and all cards that are shaded with lines.
- Deal the remaining cards face up in a 6 by 6 array on the playing surface. This array is the *Patterned Pathways* gameboard.
- Position the game pieces, one on each side of the board.
- The starting space corresponds to the ending space that is directly across the board from it.

Object of the Activity: Plan a solution pathway by comparing and matching attributes of figures.

Playing the Game:

1. Roll a die. If the die lands on 1, 2, or 3, move your game piece up to that many spaces.
 - a. To move from one space to the next, the two spaces must share a side and the figures on the spaces must share at least two attributes. (Exception: On your first turn, you may move to any adjacent space.)
 - b. The attributes two figures can share are color, shape, shading, and number of shapes. For example, if your piece is on a space with one solid, red oval, you may move to an adjacent space with two solid, red squiggles because both figures on the cards are solid and red.
 - c. Game pieces can move back to spaces they have already occupied, however, moving back to a space counts as one of your moves.
2. If you roll a 4, move to any adjacent space, even if it shares no attributes with your current space.
3. Your turn is done. Play moves to the right.
4. Play continues until one player reaches the ending point on the opposite side of the game board.

To Win: The player who reaches the space on the opposite side of the game board from their starting space wins.

Think About It:

- Compare the figures' color, shape, shading, and number of shapes. Plan a route before you make your first move.

Materials:

- Set® cards, one deck
- Tetrahedral die
- 4 game pieces

Where:

Outside	
Inside	X
On-line	
On-site	



Variations:

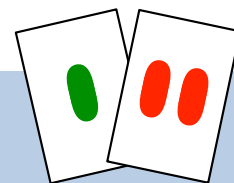
Connected Pathway: In this version, play as above. However, on your turn, each space on your game piece's path must share the **same two** attributes with the figure on which you **begin your turn**.

One Player: Find the shortest route from a starting space to the corresponding ending space.

Nothing in Common: In this version, play as above. However, instead of being able to move to an adjacent space if it shares at least two attributes, you may only move to an adjacent space if it has **no** attributes in common.

Patterned Pathways, Too

(Grades 3 through 8)



Strands:

Number &
Quantity

Algebra

Functions

Geometry

Statistics &
Probability

X

Materials:

- Set® cards, 1 deck
- Tetrahedral die
- 4 game pieces

Where:

Outside

Inside

On-line

On-site

X



Use your pattern recognition skills to move your game piece across a patterned board in this game for 1 to 4 players!

Set-Up:

- Use commercial Set® cards. Remove all cards with 3 shapes and all cards that are shaded with lines. Deal these cards face down in a 6 by 6 array on the playing surface. This array is the *Patterned Pathways, Too* gameboard.
- Shuffle the remaining Set® cards and deal 6 cards to each player.
- Position the game pieces, one on each side of the board.
- A player's starting space corresponds to the ending space that is directly across the board from it.

Object of the Activity: Plan a solution pathway by comparing and matching attributes of figures.

Playing the Game:

1. Roll the die. You may lay down that many figure cards anywhere on the gameboard, move your game piece that many adjacent spaces, or do a combination of these.
 - a. You may only move your game piece to an adjacent space if the spaces share a side and the figure on the space has two attributes in common with the figure on your current space. (Exception: On your first turn, you may move to any space along your side of the board on which a Set® card has been placed.)
 - b. The attributes that can match are color, shape, shading, and number of shapes. For example, if your game piece is on a space with one solid, red oval, you may move to an adjacent space that displays two solid, red squiggles because the figures on the cards are solid and red.
 - c. You cannot move your game piece to an open space on the board. You must land on a space that contains a figure card.
 - d. Game pieces can move back to spaces they have already occupied.
 - e. Since you may place a figure card anywhere on the board you desire, you may place a figure card down to extend your pathway, or to block an opponent's pathway.
2. Your turn is done. Play moves to the right.
3. Play continues until one player reaches the ending point on the opposite side of the game board.

To Win: The player who lands on the space opposite their starting space wins the game.

Think About It:

- Compare the figures' color, shape, shading, and number of shapes. Try to plan a pathway before you start moving your game piece around.

Variations:

Connected Pathway: Play as above. However, every space you move to must share the **same two** attributes with the figure you **begin your turn on**.

One Player: Find the shortest route from a starting space to the corresponding ending space.

Nothing in Common: Play as above. However, you may move to an adjacent space if the spaces have **no** attributes in common.